

REMARKS/ARGUMENTS

We submit herewith a Petition for Extension of Time for Response and a Request for Continued Examination Transmittal form to permit withdrawal of the finality of the Office action of April 10, 2003 under 37 CFR 1.114(d) and consideration by the Examiner of the Supplemental Information Disclosure Statement filed on May 1, 2003, after the mailing date of the final action. Reconsideration is requested in view of the current amendments to the claims.

The claims have been amended in part to distinguish from the references applied in the final action of April 10, 2003, and in part to distinguish from published European Patent Application No. EP0847226 (hereinafter "Microtonic") and PCT International Publication No. WO 01/26413 (hereinafter "Knowles"), as cited in the Supplemental Information Disclosure Statement filed May 1, 2003 after the date of the final action.

Claim 1 refers to a first snubber that limits deflections of the "other end" of the armature "in both directions parallel to the direction of the flux field," and a second snubber that limits deflections of the other end "in both directions perpendicular to the direction of the flux field." As discussed in the specification at page 5, lines 27-31, the first snubber is of the "parallel" type and the second snubber provides "edgewise snubbing".

The patents cited in Applicants' specification, as well as those applied in the final action, describe structures corresponding only to the "first snubber," and limiting only the deflections of the armature in the direction of the flux field. Carlson '654, for example, discloses elongated ridges or protrusions 41 that extend inwardly into the coil tunnel 40, located to limit the deflection of the armature in its normal direction of vibration as shown in Fig. 1. VanHalteren '947 in Fig. 4 discloses a snubber 17 that similarly limits the armature movement in its normal direction of vibration (parallel to the flux field). However, the snubber 17 is secured to the permanent magnet means as noted by the Examiner. VanHalteren '158, newly cited by the Examiner, also discloses a "first

snubber", the difference between the two VanHalteren references being primarily that '947 discloses an E-shaped armature and '158 discloses a U-shaped armature.

The Microtonic European patent application also discloses only a "first snubber" in the form of facing internal coil tunnel surfaces 33, 34 that limit the movements of the armature leg 12 in the direction of the flux field.

None of the above-described patents or published applications has a "second snubber" as defined in claim 1 as amended herewith.

The Knowles published international application differs from the previously discussed disclosures in the recognition that "if the transducer experiences a shock e.g., from being dropped, the reed can be easily damaged due to overdeflection or unwanted deflection in the horizontal or vertical directions." The embodiment of Figures 1-5 has a coil 14 that has tapered sidewalls 16, 18, the stated purpose of these walls being "to prevent or reduce unwanted horizontal deflection of the reed 24," that is, a deflection in the direction perpendicular to the direction of the flux field.

However, it is submitted that the Knowles disclosure does not anticipate the "second snubber" as defined in the revised claim 1. See the discussion in the first two full paragraphs on page 3 of the present specification. In particular, the present applicants determined after their analysis that significant reduction in the edgewise snubbing clearances is needed to provide sufficient practical protection of the armature from shocks. To achieve the desired snubbing clearances, the applicants provided a second snubber having portions thereof affixed to the permanent magnet means, such portions having a pair of surfaces respectively forming predetermined clearances from the lateral edges of the "other" end of the armature. The description in the Knowles disclosure is extremely brief and omits any discussion of the positioning of the sidewalls of the coil in relation to the permanent magnet means.

As is well known, in these transducers the spacing of the armature surfaces from the respective pole faces must be closely adjusted for proper operation of the transducer.

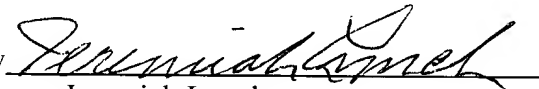
After such adjustment, the surfaces of the second snubber must have closely predetermined clearances from the lateral edges that join the armature surfaces for proper operation of the second snubber. This requires the snubber to be affixed to the permanent magnet means, not to the coil. Thus, the Knowles disclosure does not enable the provision of the predetermined clearances of small magnitude provided by the present invention.

For the foregoing reasons, reconsideration of the application and favorable action are respectfully solicited.

Respectfully submitted,

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